What is claimed is:

1. An exhaust gas purifying catalyst comprising:

a composition including a first component of a composite oxide containing zirconium and manganese and/or cobalt and a second component of zeolite.

2. A catalyst according to claim 1, wherein the composite oxide and the zeolite are in the state of a physically mixed.

3. A catalyst according to claim 1, wherein the first and second components are deposited on a monolithic carrier as homogeneous physical mixture or as separated layers.

4. A catalyst according to claim 1, wherein a weight ratio of the manganese and/or the cobalt to the zirconium comprise from 1 to 50 weight parts as oxide per 100 weight parts of the zirconium oxide.

5. A catalyst according to claim 4, wherein the weight ratio of the manganese and/or the cobalt to the zirconium comprise from 5 to 40 weight parts as oxide per 100 weight parts of the zirconium oxide.

6. A catalyst according to claim 1, wherein a first component/second component ratio is in the range of 0.05 to 2.0: 1 by weight.

7. A catalyst according to claim 6, wherein the first component/second component ratio is in the range of 0.1 to 0.7: 1 by weight.

8. A catalyst according to claim 1, wherein the first component has the manganese and/or cobalt deposited on the zirconium oxide.

9. A catalyst according to claim 1, wherein the first component is further deposited on a refractory inorganic substance.

10. A catalyst according to claim 1, wherein the second component is a proton zeolite.

11. A catalyst according to claim 10, wherein the zeolite is at least one member selected from the group consisting of ZSM-5, Ferrierite, Faujasite, β-zeolite, Mordenite and mixtures thereof.

12. A catalyst according to claim 1, wherein the second component is a zeolite modified with at least one element selected from the group consisting of iron, cerium, lanthanum, phosphorus, boron, gallium, magnesium, calcium and mixtures thereof.

13. A catalyst according to claim 1, wherein the first component further contains at least one element selected from the group consisting of bismuth, iron, cerium, praseodymium, gadolinium, lanthanum, barium, strontium, calcium, cesium, yttrium and mixtures thereof.

14. A catalyst according to claim 13, wherein an amount of the element comprise from 0.2 to 50 weight percent based on the weight of the manganese and/or the cobalt, as reduced to weight of the metal.

15. A catalyst according to claim 14, wherein an amount of the element comprise from 1 to 40 weight percent based on the weight of the manganese and/or the cobalt, as reduced to weight of the metal.

16. A method for purifying NO_x in an exhaust gas by using a catalyst, catalyst comprising: a composition comprising a composite oxide containing zirconium and manganese and/or cobalt and a zeolite in the state of a physically mixed.

17. A method according to claim 16, wherein the exhaust gas is from a diesel engine or lean burn engine.